Appl. No. 10/799,316 Amdt. dated March 18, 2008 Reply to Office Action of November 23, 2007

## Amendments to the Specification:

Please replace the Abstract on page 26, with the following rewritten Abstract:

Techniques for single function stage Galois field (GF) computations are described. The new single function stage GF multiplication requires only m-bits per internal logic stage, a savings of m-1 bits per logic stage that do not have to be accounted for as compared with a previous two function stage approach. Also, a common design GF multiplication cell is described that may be suitably used to construct an m-by-m GF multiplication array for the calculation of GF[2<sup>m</sup>] / g[x]. In addition, these techniques are further described in the context of packed data form computation, very long instruction word (VLIW) processing, and processing on multiple processing elements in parallel.